

PATENT SPECIFICATION



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PROVISIONAL SPECIFICATION.

Improvements in and connected with Road Construction.

I, GEORGE HENRY SHORTHOS, of Babcock House, Farringdon Street, London, E.C. 4, of British Nationality, do hereby declare the nature of this invention to be as follows:—

This invention relates to improvements in and connected with road construction and has for an object a construction of road surface which will be practically indestructible and will avoid the formation of potholes which will permit of using foundations of hard core or concrete of much less thickness than those at present employed and will permit of easy removal and replacement for laying pipes, cables, etc.

In accordance with the present invention I form the road surface of cast metal plates or blocks (e.g. cast iron, semi-steel or cast steel plates), suitably rectangular, with flanged side walls by which the blocks or plates can be bolted or otherwise secured together, and with longitudinal and transverse ribs connecting the flanged sides and presenting therewith a series of pockets for the reception of concrete or other blocks or for the reception of a

filling of concrete or other material. As will be understood the plate surface is adapted to rest on a foundation of concrete or hard core and the ribs and flanges with the material filling the pockets is intended to present the wearing surface. Those pockets into which the connecting bolts or the like extend may be filled with wood blocks for convenience in obtaining access to the heads of the bolts, if it is desired to remove some of the plates. The upstanding flanges and ribs present with the filling an almost indestructible and skid-proof wearing surface which will prevent the formation of potholes.

Suitably there is interposed between the metal plates or blocks a bitumastic joint allowing for expansion.

The bolt holes in the flanges of the plates may be cored holes or may be elongated holes providing for relative adjustment of the plates.

Dated this 12th day of December, 1931.
CRUIKSHANK & FAIRWEATHER,
65—66, Chancery Lane, London, W.C. 2,
and 29, St. Vincent Place, Glasgow,
Agents for the Applicant.

COMPLETE SPECIFICATION.

Improvements in and connected with Road Construction.

I, GEORGE HENRY SHORTHOS, of Babcock House, Farringdon Street, London, E.C. 4, of British Nationality, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to improvements in and connected with road construction and has for an object a construction of road surface which will be practically indestructible and will avoid the formation of potholes, which will permit of using foundations of hard core or concrete of much less thickness than those at present employed, and which will permit of easy removal and replacement for laying pipes, cables, etc.

It is old to provide for the construc-

tion of roads metal frames formed with transverse and longitudinal ribs constituting a series of pockets filled with wood blocks and to secure the frames in relation to one another and to the road by means of wedges or keys of wood driven between them.

In accordance with the present invention I form the road surface of metal plates (e.g. cast iron, cast steel plates or pressed steel or "semi-steel" i.e. a mixture of cast iron and Bessemer steel in proportions dependent on the required strength of the road), suitably rectangular, with flanged sides provided with bolt holes by which the plates can be bolted together, and with longitudinal and transverse ribs connecting the flanged sides and defining pockets for the reception of concrete or other blocks or for the recep-

tion of fillings of concrete or other material.

As will be understood, the under surface of the plate is adapted to rest on a foundation of concrete or hard core and the ribs and flanges with the material filling the pockets is intended to present the wearing surface. Those pockets into which the connecting bolts or the like extend may be filled with wood blocks for convenience in obtaining access to the heads of the bolts, if it is desired to remove some of the plates. The upstanding flanges and ribs present with the filling an almost indestructible and skid-proof wearing surface which will prevent the formation of pot-holes.

Suitably there is interposed between the metal plates or blocks a bitumastic or other approved joint allowing for expansion.

The bolt holes in the flanges of the plates may be cored holes or may be elongated holes providing for relative adjustment of the plates.

The invention is illustrated in the accompanying drawings in which Fig. 1 is a plan view and Fig. 2 a fragmentary vertical section drawn to a larger scale.

Referring to the drawings, the road plate shown comprises a cast metallic plate 1, conveniently rectangular in plan, with flanged sides 2 and with longitudinal and transverse ribs 3, 4, respectively, defining pockets 5 for the reception of concrete or other blocks or for the reception of filling 6 of concrete or other material.

As will be understood, the under surface of each plate 1 is adapted to rest on a foundation of concrete or other hard material.

The material filling the pockets 5 and the ribs and flanges form the road wearing surface.

Adjacent plates may be secured together along the flanges 2 as by bolting at 7. For convenience in obtaining access to the plate securing bolts wood blocks may be removably fitted into those pockets 5 entered by the bolts.

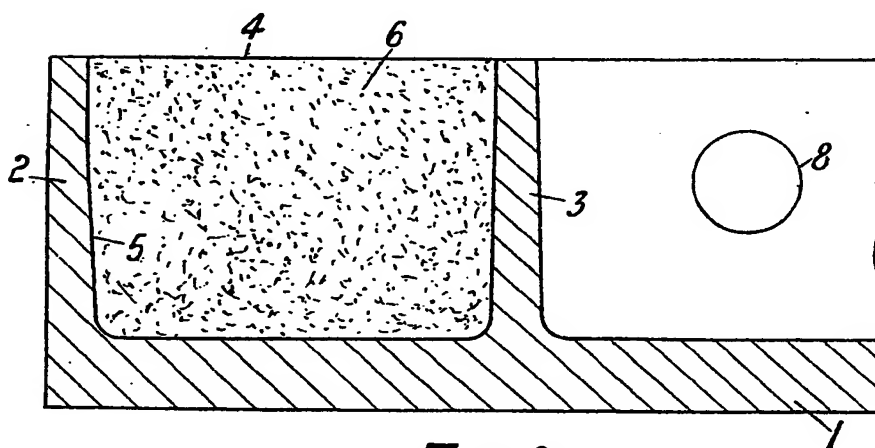
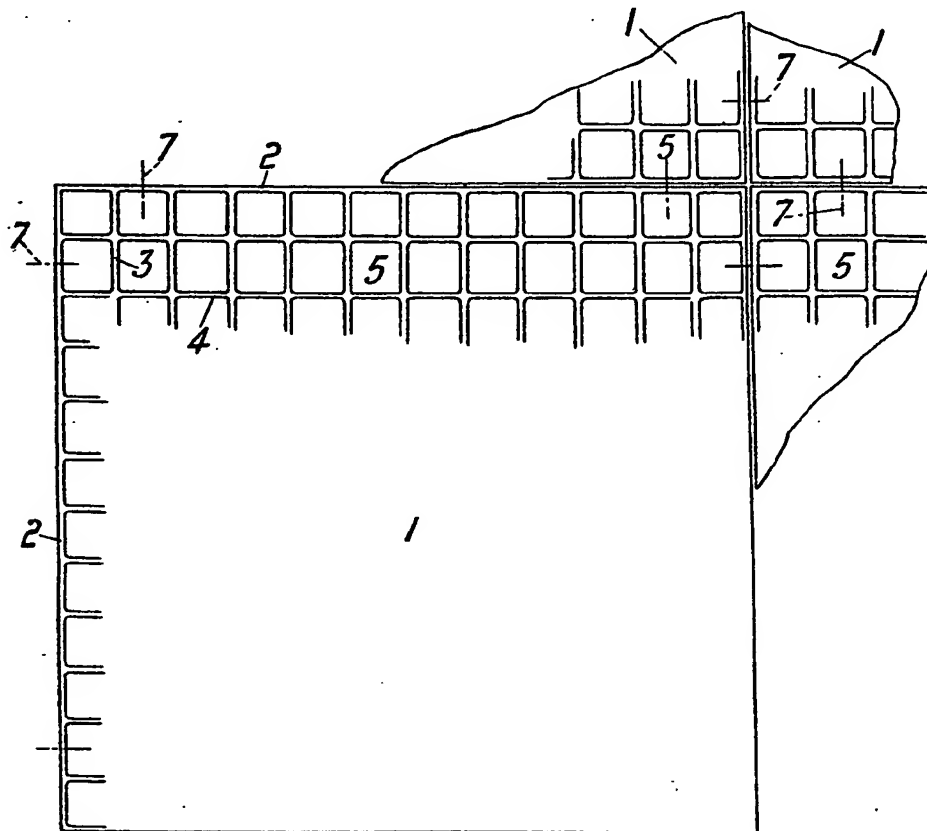
To provide for thermal expansion of the plates bitumastic joints may be interposed between the adjoining flanges 2 of adjacent plates.

The bolt holes 8 may be elongated to provide for slight relative movement of the plates.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

A road construction metallic plate having flanged sides and longitudinal and transverse ribs defining pockets for the reception of wearing blocks or fillings, the flanged sides being formed with bolt holes by means of which the plates may be bolted together.

Dated this 12th day of September, 1932.
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Malby & Sons, Photo-Litho.

